

**STATE OF MAINE
UNIFIED WATERSHED ASSESSMENT**

OCTOBER 1, 1998

Watershed Assessments

	<u>Watershed</u>	<u>Category</u>	<u>8-Digit HUC</u>
1.	St. John	2	01010001
2.	Allagash	2	01010002
3.	Fish	1	01010003
4.	Aroostook	1	01010004
5.	Meduxnekeag	1	01010005
6.	West Penobscot	2	01020001
7.	East Penobscot	3	01020002
8.	Mattawamkeag	2	01020003
9.	Piscataquis	2	01020004
10.	Lower Penobscot	2	01020005
11.	Upper Kennebec	2	01030001
12.	Dead	2	01030002
13.	Kennebec	1	01030003
14.	Upper Androscoggin	2	01040001
15.	Androscoggin	1	01040002
16.	St. Croix	2	01050001
17.	Eastern Coastal	1	01050002
18.	Central Coastal	1	01050003
19.	Casco Bay	1	01060001
20.	Saco	2	01060002
21.	Piscataqua	1	01060003

Watershed Categories (per Federal guidance):

Category I - Watersheds in Need of Restoration

Category II - Watersheds Meeting Goals, Including Those Needing Action to Sustain Water Quality

Category III - Watersheds with Pristine/Sensitive Aquatic System

Conditions on Lands Administered by Federal, State or Tribal Governments

Category IV - Watersheds with Insufficient Data to Make an Assessment

Participants & Process

The Maine Department of Environmental Protection has worked closely with the Maine Watershed Management Committee (MWMC; see membership list attached). This group

is responsible for development of the State NPS Priority Watershed List. It includes State and Federal agency staff. The committee is co-chaired by staff from the State Planning Office and the Department of Environmental Protection. Both EPA and NRCS have been very active in this group. Public and private interest groups are also represented on the MWMC, including the University of Maine Cooperative Extension Service, Maine Association of Conservation Districts, the Congress of Lake Associations, the Natural Resources Council of Maine, and the Maine Chamber & Business Alliance. The MWMC met on April 30th and June 11th to discuss priorities; copies of the June 11, 1998 UWA Final Framework were distributed to committee members at that time. Following these discussions, staff at the Maine Department of Environmental Protection prepared the draft list. Copies of the draft UWA were sent to all members for their review and comment. A copy of the UWA was also posted on the Department's internet web site. One comment was received from outside of the MWMC during the public comment period. A biologist with the Maine Department of Inland Fisheries & Wildlife in Aroostook County questioned the designation of the Allagash River as a Category III, since the majority of the watershed is in private ownership and the river is listed as an NPS Priority due to nonpoint source threats.

The MWMC met to discuss the draft list on September 3, 1998. The Committee agreed that the Allagash River designation should be changed to Category II. Concern was also raised by EPA representatives that two Indian Nations, the Penobscot and Passamaquoddy, differed in their assessment of the Penobscot River, placing it in Category I. State, Federal and Tribal representatives met to discuss this difference in assessment on September 21, 1998. At the meeting, the Tribes explained their approach to conducting the UWA. While our approaches and conclusions differ, the State supports the assessments conducted by the Penobscot and Passamaquoddy Tribes. A summary of the findings and conclusions reached at the September 21st meeting is attached.

Recommendations of the MWMC on the UWA were presented to the Land & Water Resources Council (LWRC) on September 17th. The LWRC consists of the commissioner's of the State's natural resource agencies. No concerns were raised by the LWRC over the proposed UWA.

Information Used

The UWA was put together following review of Maine's 305(b) Water Quality Assessment, including the 303(d) Waters List; the "most at risk" waterbodies list under Maine's Stormwater Management Law; the funding priorities developed by the State Technical Committee for the EQIP Program; public drinking water supplies; the Atlantic Salmon Conservation Plan and the draft NPS Priority Watersheds List. Staff used best professional judgment with respect to the percentage of a watershed that would fall into Category I.

Mercury Advisory

The Maine Bureau of Health issued a state-wide fish consumption advisory in 1997 for all fresh surface waters due to elevated levels of mercury. Because of this, the designated use of fishing is impaired in all fresh surface waters of the state. ***If mercury contamination was included as a criteria for this assessment, all 21 watersheds would have been assigned Category 1.*** In order to have some sense of priority among all 21 watersheds assessed, we have set the state-wide mercury fish consumption advisory aside as a criterion for the purpose of this assessment.

Rationale

In evaluating watersheds, consideration was given to the percentage of watershed draining to waters that are either not meeting water quality standards, or face an imminent threat of not meeting standards. Waters considered to be imminently threatened include approximately 250 lakes that are designated as “most at risk from new development” due to nonpoint source pollution under Maine’s stormwater management law, as well as waters threatened by other sources including agriculture and forestry. Lakes were an important consideration in the designation of several watersheds as Category I, including Fish River, Kennebec River, Androscoggin River, Presumpscot River and Piscataqua River.

The proposed listing of Atlantic salmon on the list of threatened species and the subsequent development of Maine’s Atlantic Salmon Conservation Plan was a key consideration in listing both the Central Coastal and Eastern Coastal watersheds as Category I.

Two watersheds have been proposed as Category III: The Allagash due to the presence of the Allagash Wilderness Waterway, and the East Penobscot since a large portion of the watershed is located in Baxter State Park.

Maine DEP staff have concluded that sufficient information exists for all watersheds; none were assessed as falling into Category IV.

Magnitude of Restoration Need

Under regulations developed by the DEP in 1996 under Maine’s Stormwater Management Law, 235 lakes were identified as “most at risk” due to new development. Of these, 37 lakes have suffered blue-green algal blooms due to high phosphorus concentrations. A number of these lakes have bloomed for the first time within the last 20 years. Most of the remaining lakes on the “most at risk” list are considered imminently threatened, meaning they could also experience a significant decline in water quality in the near future if protection measures are not taken. Many of these are included on the State’s proposed list of 181 Nonpoint Source Priority Lake Watersheds.

The NPS Priority list also includes 55 rivers and streams, and 17 coastal estuaries, many of which have been found to be impaired through assessment work. Specific impacts to streams that have been documented include low dissolved oxygen levels, high nutrient and toxic levels, sedimentation and loss of aquatic habitat. On the coast, 17 shellfish areas are closed due to bacteria. Information on specific impairments may be found on Maine's 303(d) Nonattainment List.

Overall, 100% of coastal waters, 89% of rivers and streams and 85% of lakes that are on Maine's NPS Priority Watersheds list due to threats or impairments fall into Category I watersheds under the UWA.

STATE OF MAINE WATERSHED RESTORATION PRIORITIES

Highest Priorities

The following 8-digit watersheds are proposed as restoration priorities for the reasons listed. Actual work priorities will be directed in most cases to sub-watersheds within the 8-digit HUC. Maine's Nonpoint Source Priority Watersheds List (Draft 7/30/98) provides a list of sub-watershed priorities, listed by resource type: Coastal Waters, Rivers & Streams, and Lakes.

Watershed	8-Digit HUC	Rationale
Meduxnekeag	01010005	River not attaining standards
Kennebec	01030003	Many lakes threatened or not attaining stds.
Eastern Coastal	01050002	Atlantic Salmon
Central Coastal	01050003	Atlantic Salmon
Casco Bay	01060001	Casco Bay Estuary, rivers not attaining stds., lakes imminently threatened
Piscataqua	01060003	rivers and coastal estuaries not attaining stds., lakes imminently threatened

Long-term schedule for remaining Category I watersheds

Work within the remaining Category I watersheds, as well as in a number of priority sub-watersheds in Category II will occur concurrently with efforts directed to the restoration priorities listed above. The Department will continue to support a competitive grants program using both Section 319 base funding and State bond money approved in June 1998 for this purpose. The Nonpoint Source Priority Watersheds List will provide direction for allocating resources.

Restoring water quality in Category I watersheds will be a long-term process with many remaining as priorities for years to come. This is particularly true for many lakes, which do not respond quickly to restoration activities in their watersheds.

Participants and Process

The restoration priorities identified above were largely influenced by the priorities established through the development of the Nonpoint Source Priority Watershed List (NPSPWL) developed through the MWMC. This group was tasked with developing recommendations for lists of watersheds which are priorities due to nonpoint source pollution. Several work groups were formed to develop proposals for lakes, rivers & streams, and coastal waters. Lists were published in the winter of 1998 with a public review and comment period. Revisions to the lists have recently been made based on

concerns raised during the comment period. The revised list will go back to the MWMC and the LWRC in September 1998.

The NPSPWL reflects the outcome of a lengthy and collaborative process involving members of the MWMC and support staff. The priorities developed as a result of this process highlight the locations where work needs to be done. This is particularly true for the highest priority watersheds on the list.

Information Used to Make Priority Decisions

Priority watersheds were selected based on review of priorities on Maine's 303(d) Waters List along with the priorities on the NPSPWL. In addition, consideration was given to priorities developed by the State Technical Committee for the EQIP Program, and the priority rivers identified in the Atlantic Salmon Conservation Plan.

Rationale

Six Category I watersheds were selected as priorities for restoration work. In most cases, sub-watersheds have been identified as priorities.

Meduxnekeag River

The Meduxnekeag River is not in attainment with water quality standards. It has been a priority for two phases of BMP implementation work under the Section 319 grants program. The River has also received priority funding through the EQIP program and through the PL566 USDA Watershed Program. Both point sources and nonpoint sources contribute to the problem. Final TMDL preparation is due within five years.

Kennebec River

The State's highest concentration of threatened and non-attainment lakes are located in the lower Kennebec River watershed with eight listed as non-attainment. Three clusters of lakes are of particular concern for restoration: China Lake region, Cobbosseecontee Lake region and Belgrade Lake region. Local groups are active promoting BMP implementation in all three clusters. In addition, a number of other lakes are considered to be imminently threatened. Several rivers and streams are also in non-attainment including Bond Brook, Sebasticook River and Wesserunsett Stream.

Eastern Coastal and Central Coastal

Seven rivers are priorities in the Atlantic Salmon Conservation Plan (ASCP). These include the Denny's River, East Machias River, Machias River, Narraguagus River, and Pleasant River in the Eastern Coastal region, and the Sheepscot River and Ducktrap River in the Central Coastal region. While these rivers do attain water quality standards, land

use activities in their watersheds could threaten salmon habitat. The ASCP identifies goals and objectives for these seven watersheds. Implementation of the ASCP is a priority for the State.

Casco Bay

The Casco Bay Estuary Project resulted in a plan completed in 1996. It includes recommendations for implementation activities in the watershed. Six coastal estuaries have been identified on the NPSPWL within the Casco Bay region due to NPS threats: Scarborough River, Royal River, Cousins River, Harraseeket River, Maquoit Bay and New Meadows River. The Royal River is listed as a restoration priority, along with three other rivers: East Branch of the Piscataqua River, Piscataqua River main stem, and Presumpscot River. Inland, a number of lakes are considered to be imminently threatened, including Forest Lake, Highland Lake (Windham/Falmouth), Highland Lake (Bridgton), Little Sebago Lake, Long Lake, Sabbathday Lake, and Trickey Pond.

Piscataqua River

The southern-most watershed region of the State includes the Piscataqua River, a border river with New Hampshire, which is in non-attainment with water quality standards. Spruce Creek is also an NPS priority water in non-attainment. Coastal waters that are threatened include York River, Ogunquit River and Webhannet River estuaries. Other restoration waters within the region include the Salmon Falls River (also bordering New Hampshire) Mousam River and Mousam Lake. Several other lakes are imminently threatened.